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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,639	07/31/2000	Jeffrey R. Sampson	10992786-1	3760

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EXAMINER	
ZARA, JANE J	

ART UNIT	PAPER NUMBER
1635	

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/632,639	SAMPSON ET AL.	
	Examiner	Art Unit	
	Jane Zara	1635	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 November 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires __months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on *08 November 2004*. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-26.*

   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *please see attachment*

Attachment

The amendments filed 11-8-04 will not be entered because they do not simplify or materially reduce the issues for appeal, and they raise new issues, including 112 first and second paragraph issues. The proposed amended claims 1, lines 4-5, and claim 12, lines 7-10, include the language "complementary to at least a portion of the nucleic acid template", which would trigger a new written description and 112, second paragraph rejection. Applicants argue that Vivekananda et al do not properly anticipate the claimed invention because the nucleic acid molecules synthesized by Vivekananda et al are made with the intention of detecting anthrax spores and their intended binding target is not a nucleic acid target but other preferred target molecules. Applicants argue further that Vivekananda et al do not teach the synthesis of nucleic acid molecules as claimed in the instant invention. Contrary to Applicants' assertions, Vivekananda et al teach the synthesis of the nucleic acid molecules claimed: See col. 20, line 13-col. 25, line 4, where Vivekananda et al teach the synthesis of nucleic acid molecules, e.g. comprising "the synthesis of a nascent nucleic acid in a template-dependent process..." (e.g. col. 22, lines 20-28). These nascent nucleic acid molecules optionally incorporate "exemplary purine and pyrimidine derivatives and mimics" as provided in Table 1, col. 20-21, and include the nucleotide precursors identical to those of the instantly claimed methods. The methods of making nascent nucleic acid molecules described by Vivekananda et al therefore anticipate those of the instantly claimed invention and, contrary to Applicants' assertions, the nucleic acid molecules synthesized, using the

same methods as instantly claimed, also inherently possess the same characteristics of the nucleic acids claimed.

Applicants argue that Kutyavin et al do not properly anticipate the claimed invention because Kutyavin et al pose the problem of facilitating strand invasion of a duplex nucleic acid molecule. Applicants also contrast the teaching of Kutyavin et al with the instant disclosure by asserting that the methods disclosed by Kutyavin et al, which are identical to the instantly claimed methods (e.g. see col. 4-8, which describes a method of synthesizing nucleic acid molecules by providing the precursor nucleotides identical to those instantly claimed), produce a single strand comprising these modified nucleotides, and not two strands with complementary nucleotide pairs with reduced ability to form stable hydrogen bonds. Contrary to Applicants' assertions, the methods taught previously by Kutyavin, of producing the nucleic acid strands comprising modified nucleotides within the nascent nucleic acid molecules are identical to those of the instant invention. Once the nucleic acid strands are produced by this method, it is a design choice to mix and match complementary strands containing either unmodified or modified nucleotides. Therefore, the instant 102 rejections, based on the prior disclosure of the methods claimed by either Vivekananda et al or Kutyavin et al, are maintained.

Claims 1-5, 7-17 and 19-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Vivekananda et al for the reasons of record set forth in the Office actions mailed 10-2-03 and 5-5-04.

Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kutyavin et al for the reasons of record set forth in the Office actions mailed 10-2-03 and 5-5-04.